| Project Title   | Funding   | Strategic Plan Objective | Institution  |  |
|---|-----------|--------------------------|--|--|
| An MEG investigation of neural biomarkers and language in nonverbal children with autism spectrum disorders                             | \$0       | Q1.L.A                   | University of Colorado Denver                                  |  |
| Biomarkers for autism and for gastrointestinal and sleep problems in autism   | \$0       | Q1.L.A                   | Yale University  |  |
| Epigenetic biomarkers of autism in human placenta   | \$0       | Q1.L.A                   | University of California, Davis                                |  |
| Serum antibody biomarkers for ASD   | \$0       | Q1.L.A                   | University of Texas Southwestern Medical Center                |  |
| GENETIC AND DIAGNOSTIC BIOMARKER<br>DEVELOPMENT IN ASD TODDLERS USING RESTING<br>STATE FUNCTIONAL MRI                                   | \$147,531 | Q1.L.B                   | University of Texas San Antonio                                |  |
| FUNDAMENTAL VISUAL REPRESENTATIONS AND SOCIAL COGNITION IN ASD  | \$158,000 | Q1.L.B                   | Albert Einsteign College of Medicine Yeshiva University        |  |
| GENETIC AND DIAGNOSTIC BIOMARKER<br>DEVELOPMENT IN ASD TODDLERS USING RESTING<br>STATE FUNCTIONAL MRI                                   | \$144,000 | Q1.L.B                   | Yale University  |  |
| GENETIC AND DIAGNOSTIC BIOMARKER<br>DEVELOPMENT IN ASD TODDLERS USING RESTING<br>STATE FUNCTIONAL MRI                                   | \$273,772 | Q1.L.B                   | University of California San Diego                             |  |
| Subtyping of toddlers with ASD based on patterns of social attention deficits   | \$0       | Q1.L.B                   | Yale University  |  |
| IMPLICIT LEARNING ABILITIES PREDICT<br>TREATMENT RESPONSE IN AUTISM SPECTRUM<br>DISORDERS   | \$158,963 | Q1.L.B                   | Joan and Sanford I Weill Medical College of Cornell University |  |
| Receptive vocabulary knowledge in low-functioning autism as assessed by eye movements, pupillary dilation, and event-related potentials | \$0       | Q1.L.C                   | Johns Hopkins University                                       |  |
| How autism affects speech understanding in multitalker environments   | \$0       | Q2.Other                 | University of Maryland, College Park                           |  |
| White matter glial pathology in autism  | \$0       | Q2.Other                 | East Tennessee State University                                |  |
| BRAIN MECHANISMS OF AFFECTIVE LANGUAGE<br>COMPREHENSION IN AUTISM SPECTRUM<br>DISORDERS   | \$506,507 | Q2.Other                 | University of Maryland, College Park                           |  |
| Dual modulators of GABA-A and Alpha7 nicotinic receptors for treating autism  | \$0       | Q2.Other                 | University of California, Irvine                               |  |
| The role of the new mTOR complex, mTORC2, in autism spectrum disorders  | \$0       | Q2.Other                 | Baylor College of Medicine                                     |  |
| DISRUPTION OF TROPHIC INHIBITORY SIGNALING IN AUTISM SPECTRUM DISORDERS   | \$180,832 | Q2.Other                 | Northwstern University   |  |
| Mechanisms of synaptic alterations in a neuroinflammation model of autism   | \$0       | Q2.S.A                   | University of Nebraska Medical Center                          |  |
| MATERNAL BRAIN-REACTIVE ANTIBODIES AND AUTISM SPECTRUM DISORDER   | \$190,577 | Q2.S.A                   | Feinstein Institute for Medical Research                       |  |
| Mechanisms of mitochondrial dysfunction in autism   | \$0       | Q2.S.A                   | Georgia State University                                       |  |
| Altered placental tryptophan metabolism: A crucial molecular pathway for the fetal programming of neurodevelopmental disorders          | \$0       | Q2.S.A                   | University of Southern California                              |  |

| Project Title   | Funding   | Strategic Plan Objective | Institution  |
|---|-----------|--------------------------|--|
| AUTISM AND OBESITY: CO-OCCURRING CONDITIONS OR DRUG SIDE EFFECTS?   | \$99,820  | Q2.S.E                   | Children's Mercy Hospital                                  |
| PRECURSORS TO THE DEVELOPMENT OF ANXIETY DISORDERS IN YOUNG CHILDREN WITH AUTISM SPECTRUM DISORDER  | \$589,750 | Q2.S.E                   | Duke University  |
| PRECURSORS TO THE DEVELOPMENT OF ANXIETY DISORDERS IN YOUNG CHILDREN WITH AUTISM SPECTRUM DISORDER  | \$515,246 | Q2.S.E                   | University of North Carolina at Chapel Hill                |
| IMAGING DEPRESSION IN ADULTS WITH ASD   | \$192,601 | Q2.S.E                   | State University New York Stony Brook                      |
| PRECURSORS TO THE DEVELOPMENT OF ANXIETY DISORDERS IN YOUNG CHILDREN WITH AUTISM SPECTRUM DISORDER  | \$173,826 | Q2.S.E                   | Duke University  |
| CIRCADIAN RHYTHMS IN CHILDREN WITH ASD AND THEIR INFANT SIBLINGS  | \$99,000  | Q2.S.E                   | Naval Medical Research Center                              |
| PLACENTAL IDENTIFICATION AND IMMUNE QUANTIFICATION OF ACUTE AND/OR CHRONIC INFLAMMATION IN CHILDREN DIAGNOSED WITH PLACENTAL AUTISM IN UNIVERSITY AND COMMUNITY HOSPITALS | \$148,000 | Q3.L.C                   | Institute for Basic Research in Developmental Disabilities |
| Prenatal antidepressants and autism spectrum disorder   | \$0       | Q3.L.C                   | Cincinnati Children's Hospital Medical Center              |
| PROTEOMIC MAPPING OF THE IMMUNE RESPONSE<br>TO GLUTEN IN CHILDREN WITH AUTISM   | \$67,041  | Q3.S.E                   | Columbia University New York Morningside                   |
| Risk factors, comorbid conditions, and epidemiology of autism in children   | \$0       | Q3.S.H                   | Henry M. Jackson Foundation                                |
| Modeling gut microbial ecology and metabolism in autism using an innovative ex vivo approach  | \$0       | Q3.S.I                   | University of Guelph                                       |
| Metabolic signature of antipsychotics used in the treatment of autism   | \$0       | Q4.L.C                   | University of Cincinnati                                   |
| Preclinical testing of novel oxytocin receptor activators in models of autism phenotypes  | \$0       | Q4.S.B                   | University of North Carolina at Chapel Hill                |
| Examination of the mGluR-mTOR pathway for the identification of potential therapeutic targets to treat fragile X  | \$0       | Q4.S.B                   | University of Pennsylvania                                 |
| Testing brain overgrowth and synaptic models of autism using NPCs and neurons from patient-derived iPS cells  | \$0       | Q4.S.B                   | Salk Institute for Biological Studies                      |
| Preclinical testing of novel oxytocin receptor activators in models of autism phenotypes  | \$0       | Q4.S.B                   | University of North Carolina at Chapel Hill                |
| Testing brain overgrowth and synaptic models of autism using NPCs and neurons from patient-derived iPS cells  | \$0       | Q4.S.B                   | University of California, San Francisco                    |
| Preclinical testing of novel oxytocin receptor activators in models of autism phenotypes  | \$0       | Q4.S.B                   | University of North Carolina at Chapel Hill                |
| Novel therapeutic targets to treat social behavior deficits in autism and related disorders   | \$0       | Q4.S.B                   | University of Texas Health Science Center at San Antonio   |

| Project Title  | Funding   | Strategic Plan Objective | Institution                                    |
|--|-----------|--------------------------|--|
| Intranasal oxytocin for the treatment of children and adolescents with autism spectrum disorders (ASD)                       | \$0       | Q4.S.C                   | Holland Bloorview Kids Rehabilitation Hospital |
| A randomized, controlled trial of intranasal oxytocin as<br>an adjunct to behavioral therapy for autism spectrum<br>disorder | \$0       | Q4.S.C                   | Massachusetts General Hospital                 |
| Identifying markers for treatment response to cognitive training in autism spectrum disorders                                | \$560,000 | Q4.S.F                   | University of California, Davis                |
| A randomized clinical trial of cognitive enhancement therapy for adults with autism spectrum disorders                       | \$0       | Q4.S.F                   | University of Pittsburgh                       |
| Tailored behavioral intervention for insomnia in children with autism spectrum disorders                                     | \$0       | Q4.S.H                   | University of Pennsylvania                     |
| Using technology to expand and enhance applied behavioral analysis programs for children with autism in military families    | \$0       | Q5.L.A                   | University of Nebraska Medical Center          |
| Evaluating and enhancing driving ability among teens with autism spectrum disorder (ASD)                                     | \$0       | Q6.L.A                   | University of Iowa                             |
| Evaluating and enhancing driving ability among teens with autism spectrum disorder (ASD)                                     | \$0       | Q6.L.A                   | University of Virginia                         |
| IMPROVING HEALTHCARE TRANSITION PLANNING<br>AND HEALTH-RELATED INDEPENDENCE FOR<br>YOUTH WITH ASD AND THEIR FAMILIES         | \$308,685 | Q6.S.A                   | University of Missouri                         |